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HOT KNOB

BACKGROUND OF THE INVENTION

The present invention relates to knobs generally and, more specifically, to a metallic knob assembly for attachment to pot lids and/or to other hot bodied utensils.

5 Often one needs to grasp the knob or holding member of a hot utensil, for example, of a pot lid. To avoid scolding of the fingers of a user who accidentally might forget to use an insulating cuff or the like, it is common to construct the part of the knob that is touched by hand from a synthetic material, e.g. nylon.

10 However, synthetic materials are not as hygienic nor as conducive to cleaning as knobs made of metal. Metallic materials, on the other hand, are excellent heat conductors and therefore best avoided for knobs that are used with hot utensils, to avoid injury.

SUMMARY OF THE INVENTION

15 Accordingly, it is a general object of the present invention to provide a knob assembly in which the hand graspable portion and the other externally accessible parts are made of an easy to clean metal.

It is a further object of the present invention to provide a knob assembly whose external graspable part is insulated from the heat of the utensil to which the knob assembly is attached.

20 Yet another object of the invention is to provide a metallic knob for pot lids that insulates the knob from the heat of the pot and which is still simple and inexpensive to manufacture and assemble.

The foregoing and other objects of the invention are realized with a knob assembly that is suited for use with hot cooking utensils and which comprises four

major components, including a hand graspable metallic knob, a metallic bezel for the knob, a first heat insulating separator located between the knob and the bezel and a second heat insulating separator between the bezel and the cooking utensils to which the knob assembly is to be attached.

5 Preferably, the first and second separators are disk-shaped and the first disk includes a ledge on which the knob rests without contacting either the bezel or the cooking utensil. The bezel itself has a footprint of a size larger than the corresponding footprint size of the knob. The bezel also defines a well that is dimensioned to fittingly receive the first disk. A screw assembly interlocks, holds
10 tightly and secures the knob bezel and the two separator disks to the utensil.

 When the knob assembly is fully integrated on a cooking utensil, only the knob and the peripheral region of the bezel are visible and, preferably, the interior spaces are protected against seepage of liquids thereinto. The first and second separators are preferably constructed of a synthetic material that retards heat
15 conduction, as well as heat radiation.

 Other features and advantages of the present invention will become apparent from the following description of the invention which refers to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

20 Figure 1 is an exploded perspective of the knob assembly of the present invention.

 Figures 2a through 2c are, respectively, front, rear and side views of the larger sized, heat resistant separator disk of the present invention.

 Figures 3a through 3c are, respectively, front, rear and side views of the
25 smaller sized disk of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS OF THE
INVENTION

With reference to Figure 1, the knob assembly 10 of the present invention comprises four main components, including a metallic knob 12, a bezel 16, a first
5 disk-shaped, insulating, non-heat conducting separator 14 and a second disk-shaped, insulating, non-heat conducting separator 18.

The knob assembly 10 can be connected to any hot surface, including to a lid
20 of a pot that has an extending screw 22 that can be threaded via central openings in the first and second insulators 14 and 18, respectively, and the bezel 16 into an
10 internally threaded opening 12c formed in a stem, within the knob 12. When fully assembled, the second insulator 18 prevents or at least substantially retards heat flow from the lid 20 to the bezel 16 and the first insulator 14 serves to further prevent or substantially curtail heat flow from the bezel 16 to the metallic knob 12.

More specifically, the knob 12 comprises a hat portion 12a which is smoothly
15 integrated with a depending skirt 12b with a diameter of the hat 12a being slightly larger than a diameter of the skirt 12b for easier grasping. A round peripheral edge 12d of the knob 12 rests on a tapered/sloping portion 14a of the first insulating disk 14 with the most distal portion thereof preferably touching a ledge 14b, as can be better appreciated from Figure 3c. The disk-shaped separator 14 has a central hole
20 14d which is formed in an inwardly dependent well 14c which is receivable within a corresponding well 16c of the bezel 16. Preferably, a diametrical dimensions of the peripheral edge 12d closely matches an outer diameter of the first insulator 14, as well as an internal diameter of the well 16c of the bezel 16. Thus, when the bezel 16, the knob 12 and the intermediate separator 14 are assembled together, only the
25 outlying portion of the bezel 16, which is not covered by the knob 12 is visible.

The bezel 16 itself is coupled to the surface of the lid 20 via the second separator 18 which comprises a sloping surface 18b, with a circumscribing ledge 18c. The bezel 16 contacts the sloping surface 18b and also preferably bears against

the ledge 18c to thereby become insulated from the heat of the lid 20. The screw 22 passes through an opening 18e and a well 18d of the second separator 18, and further passes through an opening 16d and the central hole 14d of the bezel 16 and the first insulator 14, respectively, so that when the knob 12 is turned, it tightly contacts the lid 20, holding the assembly firmly together, without any accessibility to the internal first and second separators 14 and 18, respectively.

Further details of the knob assembly 10 can be seen in Figures 2a, 2b and 2c which respectively show a front, rear and side view of the second and larger diameter separator 18. Preferably, an outer diameter of the second separator 18 is about 2.3750 inches and an outer diameter of the smaller separator 14 is 1.4375 inches. The smaller separator 14 is depicted via front, rear and side views thereof in Figures 3a, 3b and 3c, respectively.

The bezel 16, as well as the knob 12, are preferably constructed of metal and furthermore, preferably of a brightly colored metal. Preferably, the second separator 18 is substantially solid and makes contact with the bezel 16 only around a periphery thereof, thereby preventing not only the flowing of heat, but also radiation of heat to the bezel 16. In other words, the outer diameters of the bezel 16 and the second separator 18 are approximately equal.

Similarly, the second separator 18 has an outer diameter which is approximately of the same size as the diameter of the skirt 12b. The knob 12 makes contact only with the edge of the first separator 14, further aiding in preventing heat from flowing and radiating to the knob 12. Therefore, the knob 12 is capable of being grasped even after a pot has been at an elevated temperature for some time. The metallic knob 12 is more suitable for maintaining hygienic conditions, since it can be washed more thoroughly with strongly acting chemicals and kitchen scrubbing materials and implements. When the parts are tightly assembled together, a watertight seal is created between the knob 12 and the bezel 16, as well as between

the bezel 16 and the lid 20 via second separator 18, thereby preventing liquids from penetrating within the interior spaces of the knob assembly 10.

Although the present invention has been described in relation to particular embodiments thereof, many other variations and modifications and other uses will become apparent to those skilled in the art. It is preferred, therefore, that the present invention be limited not by the specific disclosure herein, but only by the appended claims.